STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: *10 564 886*
Source: *I-TEMP*
Date Processed by STIC: *1-30-06*

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY
FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO **REDUCE** ERRORED SEQUENCE LISTINGS, **PLEASE** USE THE **CHECKER VERSION 4.4.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (**<http://www.uspto.gov/ebc/efs/downloads/documents.htm>** , **EFS Submission User Manual** - ePAVE)
2. **U.S. Postal Service:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. **Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):**
   U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: 10/564,886

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1 ____ Wrapped Nucleics
Wrapped Aminos

The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor **after** creating it. Please adjust your right margin to .3; this will prevent "wrapping."

2 ____ Invalid Line Length

The rules require that a line **not exceed** 72 characters in length. This includes white spaces.

3 ____ Misaligned Amino
Numbering

The numbering under each 5th amino acid is misaligned. Do **not** use tab codes between numbers; use **space characters**, instead.

4 ____ Non-ASCII

The submitted file was **not** saved in ASCII(DOS) text, as **required** by the Sequence Rules. **Please ensure your subsequent submission is saved in ASCII text.**

5 ____ Variable Length

Sequence(s)____contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the **maximum** number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

6 ____ PatentIn 2.0
"bug"

A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**

7 ____ Skipped Sequences
(OLD RULES)

Sequence(s) ____ missing. If intentional, please insert the following lines for **each** skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to **include** the skipped sequences.

8 ____ Skipped Sequences
(NEW RULES)

Sequence(s) _____ missing. If **intentional**, please insert the following lines for **each** skipped sequence.
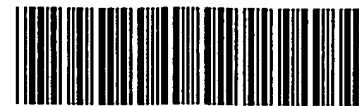<210> sequence id number
<400> sequence id number
000

9 ____ Use of n's or Xaa's
(NEW RULES)

Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of **n** or **Xaa**, and which residue **n** or **Xaa** represents.

10 ____ Invalid <213>
Response

Per 1.823 of Sequence Rules, the only **valid** <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence

11 ____ Use of <220>

Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence **or** "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32)   (Sec. 1.823 of Sequence Rules)

12 ____ PatentIn 2.0
"bug"

Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13 ____ Misuse of n/Xaa

"n" can **only** represent a single <u>nucleotide</u>; "Xaa" can **only** represent a single <u>amino acid</u>

IFWP

RAW SEQUENCE LISTING   DATE: 01/30/2006
PATENT APPLICATION: US/10/564,886   TIME: 14:49:24

Input Set : A:\11168_242.ST25v1 2006 01 16.txt
Output Set: N:\CRF4\01302006\J564886.raw

```
    3 <110> APPLICANT: McGill University, Office of Technology Transfer
    4        Sonenberg, Nahum
    5        Lopez-Lastra, Marcelo
    7 <120> TITLE OF INVENTION: Method for Inducing Hepatitis C Virus (HCV) Replication in
Vitro,
    8        Cells and Cell Lines Enabling Robust HCV Replication and Kit
    9        Therefor
   11 <130> FILE REFERENCE: 11168.242
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/564,886
C--> 14 <141> CURRENT FILING DATE: 2006-01-17
   16 <150> PRIOR APPLICATION NUMBER: CA 2,454,540
   17 <151> PRIOR FILING DATE: 2004-02-06
   19 <150> PRIOR APPLICATION NUMBER: CA 2,436,104
   20 <151> PRIOR FILING DATE: 2003-07-14
   22 <160> NUMBER OF SEQ ID NOS: 37
   24 <170> SOFTWARE: PatentIn version 3.2
   26 <210> SEQ ID NO: 1
   27 <211> LENGTH: 266
   28 <212> TYPE: DNA
   29 <213> ORGANISM: Hepatitis C virus
   32 <220> FEATURE:
   33 <221> NAME/KEY: misc_feature
   34 <222> LOCATION: (157)..(157)
   35 <223> OTHER INFORMATION: n = G or T
   37 <400> SEQUENCE: 1
   38 cactcccctg tgaggaacta ctgtcttcac gcagaaagcg tctagccatg gcgttagtat       60
   40 gagtgtcgtg cagcctccag dacccccct cccgggagag ccatagtggt ctgcggaacc      120
W--> 42 ggtgagtaca ccggaattgc caggacgacc gggtccnttc ttggataaac ccgctcacat      180
   44 gcctggagat ttgggcgtgc ccccgcaaga ctgctagccg agtagtgttg ggtcgcgaaa      240
   46 ggccttgtgg tactgcctga tagggt                                          266
   49 <210> SEQ ID NO: 2
   50 <211> LENGTH: 265
   51 <212> TYPE: DNA
   52 <213> ORGANISM: Epstein Barr virus
   54 <400> SEQUENCE: 2
   55 cactcccctg tgaggaacta ctgtcttcac gcagaaagcg tctagccatg gcgttagtat       60
   57 gagtgtcgtg cagcctccag gacccccct cccgggagag ccatagtggt ctgcggaacc      120
   59 ggtgagtaca ccggaattgc caggacgacc gggtcctttc ttggattaac ccgctcaatg      180
   61 cctggagatt tgggcgtgcc cccgcgagac tgctagccga gtagtgttgg tcgcgaaag      240
   63 gccttgtggt actgcctgat agggt                                           265
   66 <210> SEQ ID NO: 3
   67 <211> LENGTH: 226
   68 <212> TYPE: DNA
   69 <213> ORGANISM: Hepatitis C virus
```

Does Not Comply
Corrected Diskette Needed
(pg. 5)

RAW SEQUENCE LISTING   DATE: 01/30/2006
PATENT APPLICATION: US/10/564,886   TIME: 14:49:24

Input Set : A:\11168_242.ST25v1 2006 01 16.txt
Output Set: N:\CRF4\01302006\J564886.raw

```
71 <400> SEQUENCE: 3
72 ccaggaccccc ccctcccgggg agagccatag tggtctgcgg aaccggtgag tacaccggaa      60
74 ttgccaggac gaccgggtcc tttcttggat aaacccgctc aatgcctgga gatttgggcg     120
76 tgcccccgca agactgctag ccgagtagtg ttgggtcgcg aaaggccttg tggtactgcc     180
78 tgatagggtg cttgcgagtg ccccgggagg tctcgtagac cgtgca                    226
81 <210> SEQ ID NO: 4
82 <211> LENGTH: 226
83 <212> TYPE: DNA
84 <213> ORGANISM: Epstein Barr virus
86 <400> SEQUENCE: 4
87 ccaggaccccc ccctcccgggg agagccatag tggtctgcgg aaccggtgag tacaccggaa      60
89 ttgccaggac gaccgggtcc tttcttggat aaatccgctc aatgcctgga gatttgggcg     120
91 tgcccccgca agactgctag ccgagtagtg ttgggtcgcg aaaggccttg tggtactgcc     180
93 tgatagggtg cttgcgagtg ctccgggagg tctcgtagac cgtgca                    226
96 <210> SEQ ID NO: 5
97 <211> LENGTH: 131
98 <212> TYPE: DNA
99 <213> ORGANISM: Hepatitis C virus
101 <400> SEQUENCE: 5
102 cactcccctg tgaggaacta ctgtcttcac gcagaaagcg tctagccatg gcgttagtat      60
104 gagtgtcgtg cagcctccag gacccccccct cccgggagag ccatagtggt ctgcggaacc     120
106 ggtgagtaca c                                                          131
109 <210> SEQ ID NO: 6
110 <211> LENGTH: 131
111 <212> TYPE: DNA
112 <213> ORGANISM: Epstein Barr virus
114 <400> SEQUENCE: 6
115 cactcccctg tgaggaacta ctgtcttcac gcagaaagcg tctagccatg gcgttagtat      60
117 gagtgtcgtg cagcctccag gacccccccct cccgggagag ccatagtggt ctgcggaacc     120
119 ggtgagtaca c                                                          131
122 <210> SEQ ID NO: 7
123 <211> LENGTH: 131
124 <212> TYPE: DNA
125 <213> ORGANISM: Epstein Barr virus
127 <400> SEQUENCE: 7
128 cactcccctg tgaggaacta ctgtcttcac gcagaaagcg tctagccatg gcgttagtat      60
130 gagtgtcgtg cagcctccag gacccccccct cccgggagag ccatagtggt ctgcggaacc     120
132 ggtgagtaca c                                                          131
135 <210> SEQ ID NO: 8
136 <211> LENGTH: 131
137 <212> TYPE: DNA
138 <213> ORGANISM: Epstein Barr virus
140 <400> SEQUENCE: 8
141 cactcccctg tgaggaacta ctgtcttcac gcagaaagcg tctagccatg gcgttagtat      60
143 gagtgtcgta cagcctccag gccccccccct cccgggagag ccatagtggt ctgcggaacc     120
145 ggtgagtaca c                                                          131
148 <210> SEQ ID NO: 9
149 <211> LENGTH: 131
150 <212> TYPE: DNA
```

RAW SEQUENCE LISTING   DATE: 01/30/2006
PATENT APPLICATION: US/10/564,886   TIME: 14:49:24

Input Set : A:\11168_242.ST25v1 2006 01 16.txt
Output Set: N:\CRF4\01302006\J564886.raw

```
151 <213> ORGANISM: Epstein Barr virus
153 <400> SEQUENCE: 9
154 cactcccctg tgaggaacta ctgtcttcac gcagaaagcg tctagccatg gcgttagtat      60
156 gagtgtcgtg cagcctccag gacccccct cccgggagag ccatagtggt ctgcggaacc     120
158 ggtgagtaca c                                                         131
161 <210> SEQ ID NO: 10
162 <211> LENGTH: 131
163 <212> TYPE: DNA
164 <213> ORGANISM: Epstein Barr virus
166 <400> SEQUENCE: 10
167 cactcccctg tgaggaacta ctgtcttcac gcagaaagcg tctagccatg gcgttagtat      60
169 gagtgtcgtg cagcctccag gacccccct cccgggagag ccatagtggt ctgcggaacc     120
171 ggtgagtaca c                                                         131
174 <210> SEQ ID NO: 11
175 <211> LENGTH: 171
176 <212> TYPE: DNA
177 <213> ORGANISM: Hepatitis C virus
179 <400> SEQUENCE: 11
180 cggaattgcc aggacgaccg ggtcctttct tggataaacc cgctcaatgc ctggagattt      60
182 gggcgtgccc ccgcaagact gctagccgag tagtgttggg tcgcgaaagg ccttgtggta     120
184 ctgcctgata gggtgcttgc gagtgccccg ggaggtctcg tagaccgtgc a             171
187 <210> SEQ ID NO: 12
188 <211> LENGTH: 171
189 <212> TYPE: DNA
190 <213> ORGANISM: Epstein Barr virus
192 <400> SEQUENCE: 12
193 cggaattgcc aggacgaccg ggtcctttct tggataaacc cgctcaatgc ctggagattt      60
195 gggcgtgccc ccgcaagact gctagccgag tagtgttggg tcgcgaaagg ccttgtggta     120
197 ctgcctgata gggtgcttgc gagtgccccg ggaggtctcg tagaccgtgc a             171
200 <210> SEQ ID NO: 13
201 <211> LENGTH: 171
202 <212> TYPE: DNA
203 <213> ORGANISM: Epstein Barr virus
205 <400> SEQUENCE: 13
206 cggaattgcc aggacgaccg ggtcctttct tggattaacc cgctcaatgc ctggagattt      60
208 gggcgtgccc ccgcgagact gctagccgag tagtgttggg tcgcgaaagg ccttgtggta     120
210 ctgcctgata gggtgcttgc gagtgccccg ggaggtctcg tagaccgtgc a             171
213 <210> SEQ ID NO: 14
214 <211> LENGTH: 171
215 <212> TYPE: DNA
216 <213> ORGANISM: Epstein Barr virus
218 <400> SEQUENCE: 14
219 cggaattgcc gggaagactg ggtcctttct tggataaacc cactctatgc ccggccattt      60
221 gggcgtgccc ccgcaagact gctagccgag tagcgttggg ttgcgaaagg ccttgtggta     120
223 ctgcctgata gggtgcttgc gagtgccccg ggaggtctcg tagaccgtgc a             171
226 <210> SEQ ID NO: 15
227 <211> LENGTH: 171
228 <212> TYPE: DNA
229 <213> ORGANISM: Epstein Barr virus
```

```
231 <400> SEQUENCE: 15
232 cggaattgcc aggacgaccg ggtcctttct tggataaacc cgctcaatgc ctggagattt      60
234 gggcgtgccc ccgcaagact gctagccgag tagtgttggg tcgcgaaagg ccttgtggta     120
236 ctgcctgata gggtgcttgc gagtgccccg ggaggtctcg tagaccgtgc a               171
239 <210> SEQ ID NO: 16
240 <211> LENGTH: 171
241 <212> TYPE: DNA
242 <213> ORGANISM: Epstein Barr virus
244 <400> SEQUENCE: 16
245 cggaattgcc aggacgaccg ggtcctttct tggattaatc cgctcaatgc ctggagattt      60
247 gggcgtgccc ccgcgagact gctagccgag tagtgttggg tcgcgaaagg ccttgtggta     120
249 ctgcctgata gggtgcttgc gagtgccccg ggaggtctcg tagaccgtgc a               171
252 <210> SEQ ID NO: 17
253 <211> LENGTH: 383
254 <212> TYPE: DNA
255 <213> ORGANISM: Epstein Barr virus
257 <400> SEQUENCE: 17
258 gccagccccc tgatgggggc gacactccac catgaatcac tcccctgtga ggaactactg      60
260 tcttcacgca gaaagcgtct agccatggcg ttagtatgag tgtcgtgcag cctccaggac     120
262 cccccctccc gggagagcca tagtggtctg cggaaccggt gagtacaccg gaattgccag     180
264 gacgaccggg tcctttcttg gataaacccg ctcaatgcct ggagatttgg gcgtgccccc     240
266 gcaagactgc tagccgagta gtgttgggtc gcgaaaggcc ttgtggtact gcctgatagg     300
268 gtgcttgcga gtgccccggg aggtctcgta gaccgtgcac catgagcacg aatcctaaac     360
270 ctcaaagaaa aaccaaacgt aac                                              383
273 <210> SEQ ID NO: 18
274 <211> LENGTH: 26
275 <212> TYPE: DNA
276 <213> ORGANISM: Hepatitis C virus
278 <400> SEQUENCE: 18
279 atggggcga cactccacca tgaatc                                             26
282 <210> SEQ ID NO: 19
283 <211> LENGTH: 25
284 <212> TYPE: DNA
285 <213> ORGANISM: Hepatitis C virus
287 <400> SEQUENCE: 19
288 gttacgtttg gtttttcttt gaggt                                            25
291 <210> SEQ ID NO: 20
292 <211> LENGTH: 24
293 <212> TYPE: DNA
294 <213> ORGANISM: Hepatitis C virus
296 <400> SEQUENCE: 20
297 tgtcttcacg cagaaagcgt ctag                                             24
300 <210> SEQ ID NO: 21
301 <211> LENGTH: 23
302 <212> TYPE: DNA
303 <213> ORGANISM: Hepatitis C virus
305 <400> SEQUENCE: 21
306 caagcaccct atcaggcagt acc                                              23
309 <210> SEQ ID NO: 22
```

RAW SEQUENCE LISTING   DATE: 01/30/2006
PATENT APPLICATION: US/10/564,886   TIME: 14:49:24

Input Set : A:\11168_242.ST25v1 2006 01 16.txt
Output Set: N:\CRF4\01302006\J564886.raw

```
310 <211> LENGTH: 20
311 <212> TYPE: DNA.
312 <213> ORGANISM: Artificial
314 <220> FEATURE:
315 <223> OTHER INFORMATION: Artificial Construct
317 <400> SEQUENCE: 22
318 gtggggcgcc ccaggcacca
321 <210> SEQ ID NO: 23
322 <211> LENGTH: 24
323 <212> TYPE: DNA
324 <213> ORGANISM: Artificial
326 <220> FEATURE:
327 <223> OTHER INFORMATION: Artificial Construct
329 <400> SEQUENCE: 23
330 gtccttaatg tcacgcacga tttc
333 <210> SEQ ID NO: 24
334 <211> LENGTH: 21
335 <212> TYPE: DNA
336 <213> ORGANISM: Hepatitis C virus
338 <400> SEQUENCE: 24
339 gaagatgact tagatgttgt t                                21
342 <210> SEQ ID NO: 25
343 <211> LENGTH: 23
344 <212> TYPE: DNA
345 <213> ORGANISM: Hepatitis C virus
347 <400> SEQUENCE: 25
348 aaccttgata aggtgccatg ctt                              23
351 <210> SEQ ID NO: 26
352 <211> LENGTH: 21
353 <212> TYPE: DNA
354 <213> ORGANISM: Artificial
356 <220> FEATURE:
357 <223> OTHER INFORMATION: Artificial Construct
359 <400> SEQUENCE: 26
360 cgtctagcca tggcgttagg t                                21
363 <210> SEQ ID NO: 27
364 <211> LENGTH: 17
365 <212> TYPE: DNA
366 <213> ORGANISM: Artificial
368 <220> FEATURE:
369 <223> OTHER INFORMATION: Artificial Construct
371 <400> SEQUENCE: 27
372 cctgcgcggc aagtaaa                                     17
375 <210> SEQ ID NO: 28
376 <211> LENGTH: 18
377 <212> TYPE: DNA
378 <213> ORGANISM: Artificial
380 <220> FEATURE:
381 <223> OTHER INFORMATION: Artificial Construct
```

[Handwritten annotations:] P/S See item #11 on error summary sheet.

Invalid Response ← 20

Invalid Response 24

Same error 21

Same error 17

Same error

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 01/30/2006
PATENT APPLICATION: US/10/564,886   TIME: 14:49:25

Input Set : A:\11168_242.ST25v1 2006 01 16.txt
Output Set: N:\CRF4\01302006\J564886.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 157

Invalid <213> Response:
Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:22,23,26,27,28,29,30,31,32,33,34,35,36,37

VERIFICATION SUMMARY　　　　　　　DATE: 01/30/2006
PATENT APPLICATION:　**US/10/564,886**　　　TIME: 14:49:25

Input Set : **A:\11168_242.ST25v1 2006 01 16.txt**
Output Set: **N:\CRF4\01302006\J564886.raw**

L:13 M:270 C: Current Application Number differs, Replaced Current Application Number
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:42 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:120